AMENDMENTS TO THE CLAIMS

Claims 1-10. (Canceled)

11. (New) A method for operating a sliding closure for a metallurgical vessel, the sliding closure including two tensionable fireproof closure plates opposing one another, with each of the two closure plates being slidably positioned within a corresponding housing part, and with spring elements being provided for tensioning the closure plates, wherein one of the closure plates, along with its corresponding housing part, is slidable and can be moved into a closed or open position by a drive member, said method comprising:

performing an offline and/or an online diagnosis of an operating condition within an area of the closure plates, by measuring at least one of size, temperature, pressure and force associated with the sliding closure so as to obtain at least one measured value, and evaluating the at least one measured value either directly or together with additional relevant process parameters; and

based upon the diagnosis, one of

(i) continuing use of the sliding closure, and

(ii) discontinuing use of the sliding closure.

12. (New) The method according to claim 11, wherein

measuring at least one of size, temperature, pressure and force associated with the sliding closure comprises measuring a distance between the housing parts in a transverse direction relative to glide surfaces of the closure plates, and

evaluating the at least one measured value comprises transmitting the distance, as measured, to an evaluating device.

13. (New) The method according to claim 12, wherein

measuring a distance between the housing parts in a transverse direction relative to glide surfaces of the closure plates comprises measuring distances between the housing parts, at plural

locations, in a transverse direction relative to the glide surfaces of the closure plates, such that transmitting the distance, as measured, to an evaluating device comprises transmitting the distances, as measured, to the evaluating device.

14. (New) The method according to claim 11, wherein

measuring at least one of size, temperature, pressure and force associated with the sliding closure comprises measuring pressure of the drive member and a stroke position of the slideable closure plate, and

evaluating the at least one measured value includes evaluating the pressure and stroke position, as measured, so as to judge a frictional relationship between the closure plates.

15. (New) The method according to claim 11, wherein

measuring at least one of size, temperature, pressure and force associated with the sliding closure comprises measuring a temperature at least one of

(i) near the housing parts,

(ii) near the closure plates, and

(iii) at locations other than near the housing parts and near the closure plates.

16. (New) The method according to claim 11, wherein

measuring at least one of size, temperature, pressure and force associated with the sliding closure comprises measuring biasing forces applied by the spring elements in tensioning of the closure plates, and

evaluating the at least one measured value includes evaluating the biasing forces, as measured, so as to determine whether either of the spring elements is no longer functional.

17. (New) The method according to claim 11, wherein

evaluating the at least one measured value comprises comparing the at least one measured value with one of a target value and a target value range, and

one of

(i) continuing use of the sliding closure, and

(ii) discontinuing use of the sliding closure

comprises one of

(i) continuing use of the sliding closure if the at least one measured value deviates from the one of the target value and the target value range by no more than a predetermined amount, and

(ii) discontinuing use of the sliding closure if the at least one measured value deviates from the one of the target value and the target value range by greater than the predetermined amount.

18. (New) The method according to claim 17, further comprising:

adjusting the one of the target value and the target value range with aid of process parameters during use of the closure plates.

19. (New) The method according to claim 11, wherein the metallurgical vessel includes a pan into which smelt is to be poured, and further comprising:

protocolling and storing the at least one measured value and data relating to the pan and the smelt to be poured, with regard to temperature, treatment, and pouring time, which are the additional relevant process parameters, and

incorporating the additional relevant process parameters during determination of target values with which the at least one measured value is to be compared.

20. (New) A sliding closure for a metallurgical vessel, comprising:

two tensionable fireproof closure plates opposing one another, with each of the two closure plates being positioned within a corresponding housing part, and with one of the closure plates, along with its corresponding housing part, being slidable;

spring elements for tensioning the closure plates;

a drive member for sliding the one of the closure plates, along with its corresponding housing part, into a closed or open position; and

at least one measurement sensor located at least one of

(i) near the housing parts,

(ii) near the drive member, and

(iii) locations other than near the housing parts and near the drive member,

wherein the at least one measurement sensor is to measure at least one of size, temperature, pressure and force associated with the sliding closure so as to obtain at least one measured value, which at least one measured value is to be evaluated, either directly or together with additional relevant process parameters, such that an offline and/or an online diagnosis of an operating condition within an area of the closure plates can be performed, whereby, based upon the diagnosis, one of

(i) continuing use of the sliding closure, and

(ii) discontinuing use of the sliding closure,

can be performed.

21. (New) The sliding closure according to claim 20, wherein

said at least one measurement sensor comprises at least one sensor for measuring a distance between the housing parts in a transverse direction relative to glide surfaces of the closure plates, which distance, as measured, is to be transmitted to an evaluating device as the at least one measured value to be evaluated.

22. (New) The sliding closure according to claim 20, wherein

said at least one measurement sensor comprises at least one sensor for measuring pressure of the drive member and a stroke position of the one of the closure plates, which pressure and stroke position, as measured, correspond to the at least one measured value to be evaluated and allow for a frictional relationship between the closure plates to be judged.

23. (New) The sliding closure according to claim 20, wherein

said at least one measurement sensor comprises at least one sensor for measuring a temperature at least one of

(i) near the housing parts,

(ii) near the closure plates, and

(iii) at locations other than near the housing parts and near the closure plates.

24. (New) The sliding closure according to claim 20, wherein

said at least one measurement sensor comprises sensors for measuring biasing forces applied by the spring elements in tensioning of the closure plates, which biasing forces, as measured, correspond to the at least one measured value to be evaluated and allow for a determination to be made as to whether either of the spring elements is no longer functional.